



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,733	08/31/2001	Genichi Matsuda	122.1469	8403

21171 7590 02/17/2004
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

LAO, LUN YI

ART UNIT PAPER NUMBER

2673

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,733

Applicant(s)

MATSUDA ET AL.

Examiner

Lao Y Lun

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 8, 11-13 and 17-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 10 and 14-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All. b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2673

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al(6,356,259) in view of Nakaishi et al(5,844,175).

As to claims 14-15, Maeda et al teach a touch panel having a pair of panels(2,3) each having a transparent conductive film(4,5) adhered on a transparent board which are arranged via electrically insulating spacers(6) and the pair of panels(2,3) are joined at perimeters via the adhesive tape(10)(see figures 1-2; column 6, lines 13-38 and column 7, lines 26-40). Maeda et al teach a conductive film damage preventing element(reactive adhesive) made of elastic material to prevent damage by the edge of the adhesive tape(10)(see figures 1-2, 5; column 3, lines 54-68; column 4, lines 1-8 and column 7, lines 1-53).

Maeda et al fail to disclose the conductive film divided into a plurality of regions of desired forms by channels.

Nakaishi et al teach the conductive film(1) being divided into a plurality of regions of desired forms by channels(see figures 1A and 6) and a double-side adhesive layer(10)(see figures 1-4C; column 5, lines 1-3 and column 6, lines 2-19). It would have been obvious to have modified Maeda et al with the teaching of Nakaishi et al, so drive control circuits for a touch panel could be integrated in the touch panel.

3. Claims 1-4, 9-10 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaishi et al(5,844,175) in view of Aroyan et al(6,163,313) and Katsumura(JP 04-143823)..

As to claims 1-4, 9-10 and 14-16, Nakaishi et al teach a touch panel having a pair of panels(1, 2) each having a transparent conductive film(3a, 3b) adhered on a transparent board which are arranged via electrically insulating spacers(9)(see figure 1B; column 3, lines 47-68 and column 4, lines 1-21). Nakaishi et al teach the conductive film(1) being divided into a plurality of regions of desired forms by channels(see figures 1A and 6).

Nakaishi et al fail to disclose the channel is formed by laser etching and a conductive film damage preventing element.

Aroyan et al teach the conductive film(220, 205) being divided into a plurality of regions of desired forms by channels(305a or 305b) formed by laser etching(see figure 6B, 6C; column 14,

Art Unit: 2673

lines 53-68; column 15, lines 1-3; and column 20, lines 10-18). It would have been obvious to have modified Nakaishi et al with the teaching of Arovan et al, because laser etching is accurate, speeding and controlling.

Katsumura teaches a conductive film damage preventing element(4) made of elastic material(rubber)(see figure 1; abstract and constitution). It would have been obvious to have modified Nakaishi as modified with the teaching of Arovan et al, so as to recover the conductive film being in dent and prevent detection errors due to discrepancies in the position being pressed and that which is actually sensed.

As to claims 2-4, Nakanishi et al teach a plurality of electrode circuits connected to different external conductive wires are provided on the conductive film(3b) which is divided into the same number of regions as the electrode circuits, and boundary lines are formed with narrow channels so that said plurality of electrode circuits are not short-circuited(see figures 1A and 6).

As to claims 9-10 and 14-16, Nakaishi et al teach a double-faced tape(10)(see figures 1A, 1B, 4F, 7; column 1, lines 55-52; column 5, lines 1-3 and column 6, lines 17-19).

Art Unit: 2673

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaishi et al(5,844,175) in view of Aroyan et al(6,163,313), Katsumura and Hino et al(6,168,910).

Nakaishi et al as modified fail to point out the diameter of laser spot is 0.1mm to 2mm,

Hino et al teach the diameter of a laser spot for etching is about 0.1mm(see column 1, lines 26-36). It would have been obvious to have modified Nakaishi et al as modified with the teaching of Hino et al, since one ordinary skill in the art would find the best size(around 0.1 mm diameter) of a laser spot for achieving the best result of laser etching.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaishi et al(5,844,175) in view of Aroyan et al(6,163,313) , Katsumura and Sukenori et al(5,943,106).

Nakaishi et al as modified fail to point out wavelength of the laser light is 900nm or more.

Sukenori teaches the wavelength of a laser light for etching is more than 900nm (see figure 1 and column 6, lines 18-25). It would have been obvious to have modified Nakaishi et al as modified with the teaching of Sukenori since one ordinary skill in the art would find the suitable wavelength(e.g. around 900nm) of the laser light for achieving the best result of laser etching.

Art Unit: 2673

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaishi et al(5,844,175) in view of Aroyan et al(6,163,313) , Katsumura and Yamagishi et al(5,349,155).

Nakaishi et al as modified fail to point out pulse width of the laser light is 1ns.

Yamagishi et al teach the pulse width of a laser light for etching is 1ns(see figure 1 and column 3, lines 27-39). It would have been obvious to have modified Nakaishi et al as modified with the teaching of Yamagishi et al since one would select the best pulse width(about 1ns) to perform a laser etching function according to his/her experience to achieve the best result of laser etching and the pulse width of laser would be changed via the frequency of laser.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sato et al teach an adhesive layer made of rubber.

8. Applicant's arguments with respect to claims 1-7, 9-10 and 14-16 have been considered but are moot in view of the new ground(s) of rejection.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi, Lao whose telephone number is (703) 305-4873.

If attempts to reach the examiner by telephone are unsuccessful, the

Art Unit: 2673

examiner's supervisor, Bipin Shalwala, can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

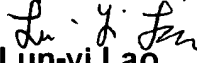
or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application
or proceeding should be directed to the Technology Center 2600 Customer
Service Office whose telephone number is (703) 306-0377.

September 2, 2003


Lun-yi Lao
Primary Examiner